

Application. No. 10/668,805
Amendment dated June 16, 2008
Reply to Office Action of March 14, 2008

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 - 28 (cancelled)

Claim 29 (currently amended): A method for drilling and cutting to prepare an osteotomy in a jawbone, comprising the steps of:

a) using a cutting and drilling blade with [[an]] a dual lobed single plane osteotomy locator tip of a single, one-piece multifunctional dental surgical tool to precisely locate an osseous implant site and prevent wandering and slipping of said tip to perform crestal bone marking;

b) using a redirectable tip of said cutting and drilling blade to avoid bone and tissue anatomical vital sites in a patient's jawbone;

c) using a crestal bone height reducer operatively formed as serrated edges on [[from]] said cutting and drilling blade, to create a leveled implant osseous platform by moving said cutting and drilling blade in a buccal-lingual, nonlinear motion;

d) using said crestal bone height reducer to harvest bony particulate material;

e) using a tapered countersink of said single, one-piece multifunctional dental surgical tool to create a counterbore in cortical bone of said jawbone;

f) using a gross osseous crestal bone height reducer of said single, one-piece multifunctional dental surgical tool to harvest bony particulate materials;

g) using an osteocompressor operatively connected to said gross osseous crestal bone height reducer to compress the osseous site, completing the preparation of said osteotomy in said jawbone; and

h) using a synthetic bone graft material mixed with said bony particulate material to reconstruct bone structures.

Claim 30 (new) A single, one-piece, multifunctional rotary tool bit for preparing an osteotomy in a jawbone, comprising:

a) a longitudinal, rotatable shaft having a proximal end and a distal end;

b) a mounting shank disposed at said proximal end of said longitudinal, rotatable shaft for interfacing with a handpiece of an osteotomy cutting and drilling system;

c) a cutting and drilling portion axially aligned with and disposed at said distal end of said longitudinal, rotatable shaft, and comprising:

i) an osteotomy locator tip comprising dual lobes disposed in a common plane, formed at a distal end of said cutting and drilling portion;

ii) a lateral redirector portion comprising cutting edges disposed in a common plane, axially aligned with and disposed adjacent said osteotomy locator tip; and

iii) a crestal bone height reducing portion comprising multifaceted serrated cutting edges, disposed intermediate said lateral redirector portion and said longitudinal, rotatable shaft.

Claim 31 (new) The single, one-piece, multifunctional rotary tool bit in accordance with claim 30, wherein said cutting edges of said lateral redirector portion are serrated.

Claim 32 (new) The single, one-piece, multifunctional rotary tool bit in accordance with claim 30, wherein said lateral redirector portion is approximately 1 to 3 millimeters in length, and said crestal bone height reducing portion is approximately 5 millimeters in length.

Claim 33 (new) The single, one-piece, multifunctional rotary tool bit in accordance with claim 30, comprising:

d) an osteocompressive portion axially aligned with and disposed intermediate said longitudinal, rotatable shaft and said cutting and drilling portion.

Claim 34 (new) The single, one-piece, multifunctional rotary tool bit in accordance with claim 33, comprising:

e) a tapered countersink axially aligned with and disposed intermediate said osteocompressive portion and said cutting and drilling portion.

Claim 35 (new) The single, one-piece, multifunctional rotary tool bit in accordance with claim 34, wherein said tapered countersink further comprises a gross osseous crestal bone height reducer.

Claim 36 (new) The single, one-piece, multifunctional rotary tool bit in accordance with claim 35, wherein said lateral redirector portion is approximately 1 to 3 millimeters in length, said crestal bone height reducing portion is approximately 5 millimeters in length, said tapered countersink is approximately 2 millimeters in length, and said osteocompressive portion is approximately 2 millimeters in length.

Claim 37 (new) The single, one-piece multifunctional rotary tool bit in accordance with claim 35, wherein said cutting and drilling portion is coated with a material to reduce the coefficient of friction, improve drilling and cutting performance, improve wear and corrosion resistance, and decrease the thermal conductivity of said cutting and drilling blade.

Claim 38 (new) The single, one-piece, multifunctional rotary tool bit in accordance with claim 35, comprising:

f) a linking member axially aligned with and disposed intermediate said osteocompressive portion and said distal end of said rotatable shaft.

Claim 39 (new) The single, one-piece, multifunctional rotary tool bit in accordance with claim 38, wherein said linking member is coated with a material to reduce the coefficient of friction, and improve wear and corrosion resistance of said linking member.

Claim 40 (new) The single, one-piece, multifunctional rotary tool bit in accordance with claim 38, wherein said mounting shank includes a chuck comprising a generally I-shaped flat side and a generally semicircular disk above and adjacent to a generally semicircular groove.

Claim 41 (new) The single, one-piece, multifunctional rotary tool bit in accordance with claim 40, in combination with a rotation-providing handpiece to form a dental drilling and cutting system.

Claim 42 (new) The single, one-piece, multifunctional rotary tool bit in accordance with claim 30, comprising:

d) a tapered countersink axially aligned with and disposed intermediate said longitudinal, rotatable shaft and said cutting and drilling portion.

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Claim 43 (new) The single, one-piece, multifunctional rotary tool bit in accordance with claim 42, wherein said tapered countersink further comprises a gross osseous crestal bone height reducer.

Claim 44 (new) The single, one-piece, multifunctional rotary tool bit in accordance with claim 43, comprising:

e) an osteocompressive portion axially aligned with and disposed intermediate said longitudinal, rotatable shaft and said tapered countersink.